AMENDMENTS TO CLAIMS

1.   (Currently Amended) A method for managing configuration data for a router, the method comprising the machine-implemented steps of:

querying the router to determine a plurality of functional areas supported by the router;

receiving, from the router, data indicating the plurality of functional areas supported by the router;

generating and displaying a plurality of user interface objects on a graphical user interface, wherein each user interface object from the plurality of user interface objects corresponds to configuration data for one of the plurality of functional areas supported by the router;

wherein generating and displaying the plurality of user interface objects further comprises, based on the data indicating the plurality of functional areas supported by the router, determining which user interface objects to generate and display; and

in response to detecting a user selection of a particular user interface object from the plurality of user interface objects,

allowing the user to modify the configuration data corresponding to the particular user interface object to generate modified configuration data; and

sending the modified configuration data to the router.

2.   (Currently Amended) A machine-readable medium for managing configuration data for a router, the machine-readable medium carrying instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

querying the router to determine a plurality of functional areas supported by the router;

receiving, from the router, data indicating the plurality of functional areas supported by the router;

generating and displaying a plurality of user interface objects on a graphical user interface, wherein each user interface object from the plurality of user interface

objects corresponds to configuration data for one of the plurality of functional

areas supported by the router;

wherein generating and displaying the plurality of user interface objects further

comprises, based on the data indicating the plurality of functional areas

supported by the router, determining which user interface objects to

generate and display; and

in response to detecting a user selection of a particular user interface object from the

plurality of user interface objects,

allowing the user to modify the configuration data corresponding to the particular

user interface object to generate modified configuration data; and

sending the modified configuration data to the router.

3.   (Currently Amended) An apparatus for managing configuration data for a router, the

apparatus comprising one or more processors and a memory storing instructions which, when

executed by the one or more processors, cause the one or more processors to perform the steps

of:

querying the router to determine a plurality of functional areas supported by the router;

receiving, from the router, data indicating the plurality of functional areas supported by

the router;

generating and displaying a plurality of user interface objects on a graphical user

interface, wherein each user interface object from the plurality of user interface

objects corresponds to configuration data for one of the plurality of functional

areas supported by the router;

wherein generating and displaying the plurality of user interface objects further

comprises, based on the data indicating the plurality of functional areas

supported by the router, determining which user interface objects to

generate and display; and

in response to detecting a user selection of a particular user interface object from the

plurality of user interface objects,

allowing the user to modify the configuration data corresponding to the particular

user interface object to generate modified configuration data; and

sending the modified configuration data to the router.

4.   (Currently Amended) A method for managing network device configuration data, the method comprising the machine-implemented steps of:

 determining which of a plurality of functional areas are supported by a network device; and

 generating and displaying a plurality of user interface objects on a graphical user interface, wherein each user interface object from the plurality of user interface objects corresponds to configuration data for one of the plurality of functional areas that is supported by the network device;

  wherein generating and displaying the plurality of user interface objects further comprises, based on which of the plurality of functional areas are determined to be supported by the router, determining which user interface objects to generate and display.

5.   (Original) The method as recited in Claim 4, further comprising the machine-implemented step of selecting the visual appearance of a particular user interface object from the plurality of user interface objects to reflect a state of the configuration data corresponding to the particular user interface object.

6.   (Original) The method as recited in Claim 4, further comprising the machine-implemented step of in response to detecting a user selection of a particular user interface object from the plurality of user interface objects,

 retrieving, from the network device, configuration data corresponding to the particular user interface object,

 allowing the user to modify the configuration data corresponding to the particular user interface object to generate modified configuration data, and

 sending only the modified configuration data to the network device.

7.   (Original) The method as recited in Claim 6, further comprising the machine-implemented step of launching one or more of a plurality of application programs to allow the user to modify the configuration data corresponding to the particular user interface object.

50325-0846 (Seq. No. 8505)   -4-

8.   (Original) The method as recited in Claim 6, further comprising the machine-implemented step of changing the visual appearance of the particular user interface object to indicate to the user that the configuration data corresponding to the particular user interface object has been modified.

9.   (Original) The method as recited in Claim 6, further comprising the machine-implemented step of in response to detecting a user selection of another user interface object associated with committing changes in configuration data on network devices, sending to the network device a request for the network device to implement the modified configuration data.

10.   (Original) The method as recited in Claim 9, further comprising the machine-implemented step of in response to receiving a notification from the network device that the modified configuration data has been implemented by the network device, changing the visual appearance of the particular user interface object to indicate to the user that the modified configuration data has been implemented by the network device.

11.   (Original) The method as recited in Claim 4, further comprising the machine-implemented step of in response to determining that a particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device, changing the visual appearance of a particular user interface object from the plurality of user interface objects to visually indicate to a user that the particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device.

12.   (Currently Amended) The method as recited in Claim 4, wherein the step of determining a~which of the plurality of functional areas are supported by a~the network device includes querying the network device to determine which of the plurality of functional areas are supported by a~the network device.

13.   (Currently Amended) The method as recited in Claim 4, wherein the step of determining a~which of the plurality of functional areas are supported by a~the network device includes determining a plurality of functional areas supported by a network device and for which of the

plurality of functional areas the network device and a client have compatible configuration application program interfaces.

14.   (Original) The method as recited in Claim 4, further comprising the machine-implemented steps of:

in response to detecting a user selection of a particular user interface object from the
plurality of user interface objects,

retrieving, from the network device, configuration data corresponding to the particular
user interface object,

displaying the configuration data on a graphical user interface; and

in response to detecting that the configuration data retrieved from the network device is
no longer consistent with configuration data implemented on the network device,
changing the visual appearance of the particular user interface object to indicate
that the configuration data retrieved from the network device is no longer
consistent with configuration data implemented on the network device.

15.   (Currently Amended) A machine-readable storage medium for managing network device configuration data, the machine-readable medium carrying storing instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

determining which of a plurality of functional areas are supported by a network device;
and

generating and displaying a plurality of user interface objects on a graphical user
interface, wherein each user interface object from the plurality of user interface
objects corresponds to configuration data for one of the plurality of functional
areas that is supported by the network device;
wherein generating and displaying the plurality of user interface objects further
comprises, based on which of the plurality of functional areas are
determined to be supported by the router, determining which user interface
objects to generate and display.

16.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, further comprising storing one or more additional instructions which, when executed by the one

or more processors, cause the one or more processors to perform the step of selecting the visual appearance of a particular user interface object from the plurality of user interface objects to reflect a state of the configuration data corresponding to the particular user interface object.

17.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, further storing comprising one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to detecting a user selection of a particular user interface object from the plurality of user interface objects,

>   retrieving, from the network device, configuration data corresponding to the particular
>   user interface object,
>   allowing the user to modify the configuration data corresponding to the particular user
>   interface object to generate modified configuration data, and
>   sending only the modified configuration data to the network device.

18.   (Currently Amended) The machine-readable storage medium as recited in Claim 17, further storing comprising one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of launching one or more of a plurality of application programs to allow the user to modify the configuration data corresponding to the particular user interface object.

19.   (Currently Amended) The machine-readable storage medium as recited in Claim 17, further storing comprising one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of changing the visual appearance of the particular user interface object to indicate to the user that the configuration data corresponding to the particular user interface object has been modified.

20.   (Currently Amended) The machine-readable storage medium as recited in Claim 17, further storing comprising one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to detecting a user selection of another user interface object associated with committing changes in

configuration data on network devices, sending to the network device a request for the network device to implement the modified configuration data.

21.   (Currently Amended) The machine-readable storage medium as recited in Claim 20, further storing ~~comprising~~ one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to receiving a notification from the network device that the modified configuration data has been implemented by the network device, changing the visual appearance of the particular user interface object to indicate to the user that the modified configuration data has been implemented by the network device.

22.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, further storing ~~comprising~~ one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to determining that a particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device, changing the visual appearance of a particular user interface object from the plurality of user interface objects to visually indicate to a user that the particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device.

23.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, wherein the step of determining ~~a~~ which of the plurality of functional areas are supported by ~~a~~ the network device includes querying the network device to determine which of the plurality of functional areas are supported by ~~a~~ the network device.

24.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, wherein the step of determining ~~a~~ which of the plurality of functional areas are supported by ~~a~~ the network device includes determining ~~a plurality of functional areas supported by a network device and~~ for which of the plurality of functional areas the network device and a client have compatible configuration application program interfaces.

25.   (Currently Amended) The machine-readable storage medium as recited in Claim 15, further storing comprising one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the steps of:

        in response to detecting a user selection of a particular user interface object from the plurality of user interface objects,

        retrieving, from the network device, configuration data corresponding to the particular user interface object,

        displaying the configuration data on a graphical user interface; and

        in response to detecting that the configuration data retrieved from the network device is no longer consistent with configuration data implemented on the network device, changing the visual appearance of the particular user interface object to indicate that the configuration data retrieved from the network device is no longer consistent with configuration data implemented on the network device.

26.   (Currently Amended) An apparatus for managing network device configuration data, the apparatus comprising one or more processors and a memory storing instructions which, when executed by the one or more processors, cause the one or more processors to perform the steps of:

        determining which of a plurality of functional areas are supported by a network device; and

        generating and displaying a plurality of user interface objects on a graphical user interface, wherein each user interface object from the plurality of user interface objects corresponds to configuration data for one of the plurality of functional areas that is supported by the network device;

        wherein generating and displaying the plurality of user interface objects further comprises, based on which of the plurality of functional areas are determined to be supported by the router, determining which user interface objects to generate and display.

27.   (Original) The apparatus as recited in Claim 26, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause

the one or more processors to perform the step of selecting the visual appearance of a particular user interface object from the plurality of user interface objects to reflect a state of the configuration data corresponding to the particular user interface object.

28.   (Original) The apparatus as recited in Claim 26, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to detecting a user selection of a particular user interface object from the plurality of user interface objects,

> retrieving, from the network device, configuration data corresponding to the particular user interface object,
>
> allowing the user to modify the configuration data corresponding to the particular user interface object to generate modified configuration data, and
>
> sending only the modified configuration data to the network device.

29.   (Original) The apparatus as recited in Claim 28, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of launching one or more of a plurality of application programs to allow the user to modify the configuration data corresponding to the particular user interface object.

30.   (Original) The apparatus as recited in Claim 28, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of changing the visual appearance of the particular user interface object to indicate to the user that the configuration data corresponding to the particular user interface object has been modified.

31.   (Original) The apparatus as recited in Claim 28, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to detecting a user selection of another user interface object associated with committing changes in configuration data on network devices, sending to the network device a request for the network device to implement the modified configuration data.

32.   (Original) The apparatus as recited in Claim 31, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to receiving a notification from the network device that the modified configuration data has been implemented by the network device, changing the visual appearance of the particular user interface object to indicate to the user that the modified configuration data has been implemented by the network device.

33.   (Original) The apparatus as recited in Claim 26, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the step of in response to determining that a particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device, changing the visual appearance of a particular user interface object from the plurality of user interface objects to visually indicate to a user that the particular functional area of the configuration data has been modified after the particular functional area of configuration data was received from the network device.

34.   (Currently Amended) The apparatus as recited in Claim 26, wherein the step of determining a-which of the plurality of functional areas are supported by a-the network device includes querying the network device to determine which of the plurality of functional areas are supported by a-the network device.

35.   (Currently Amended) The apparatus as recited in Claim 26, wherein the step of determining a-which of the plurality of functional areas are supported by a-the network device includes determining a plurality of functional areas supported by a network device and for which of the plurality of functional areas the network device and a client have compatible configuration application program interfaces.

36.   (Original) The apparatus as recited in Claim 26, wherein the memory further comprises one or more additional instructions which, when executed by the one or more processors, cause the one or more processors to perform the steps of:

        in response to detecting a user selection of a particular user interface object from the
                plurality of user interface objects,

retrieving, from the network device, configuration data corresponding to the particular

user interface object,

displaying the configuration data on a graphical user interface; and

in response to detecting that the configuration data retrieved from the network device is

no longer consistent with configuration data implemented on the network device,

changing the visual appearance of the particular user interface object to indicate

that the configuration data retrieved from the network device is no longer

consistent with configuration data implemented on the network device.

37-54. (Withdrawn)

55. (Currently Amended) The method of Claim 4 wherein the configuration data for at least
two ~~of the~~ functional areas <u>supported by the network device</u> ~~in the plurality of functional areas~~
share a common configuration data item.

56. (Currently Amended) The method of Claim 4, further comprising the step<u>s</u> of:

generating and displaying a common user interface object on the graphical user interface,

wherein the common user interface object pertains to common configuration data

for a common functional area, wherein the common functional area pertains to at

least two interfaces of the network device;

receiving input that indicates a change to a data item in the common configuration data;

and

based upon the input, generating the modified configuration data, wherein the modified

configuration data indicates changes for the at least two interfaces.

57. (Currently Amended) The method of Claim 4, wherein<u>:</u>

the step of determining <u>which of</u> ~~a~~ <u>the</u> plurality of functional areas <u>are</u> supported by ~~a~~ <u>the</u>

network device includes determining, based on permission data, that a user has

permission to access ~~each~~ <u>one or more of the</u> functional area<u>s</u> ~~in the plurality of~~

~~functional areas~~ <u>that are supported by the network device; and</u>

<u>the step of generating and displaying the plurality of user interface objects further</u>

<u>comprises, based on which one or more of the functional areas the user has</u>

<u>permission to access, determining which user interface objects to generate and
display.</u>

58.   (New) The machine-readable storage medium as recited in Claim 15, wherein the
configuration data for at least two functional areas supported by the network device share a
common configuration data item, and further storing one or more additional instructions which,
when executed by the one or more processors, cause the one or more processors to perform the
steps of:

> generating and displaying a common user interface object on the graphical user interface,
> wherein the common user interface object pertains to common configuration data
> for a common functional area, wherein the common functional area pertains to at
> least two interfaces of the network device;

> receiving input that indicates a change to a data item in the common configuration data;
> and

> based upon the input, generating the modified configuration data, wherein the modified
> configuration data indicates changes for the at least two interfaces.

59.   (New) The machine-readable storage medium as recited in Claim 15, wherein:

> the step of determining which of the plurality of functional areas are supported by the
> network device includes determining, based on permission data, that a user has
> permission to access one or more of the functional areas that are supported by the
> network device; and

> the step of generating and displaying the plurality of user interface objects further
> comprises, based on which one or more of the functional areas the user has
> permission to access, determining which user interface objects to generate and
> display.

60.   (New) The apparatus as recited in Claim 26, wherein:

> the configuration data for at least two functional areas supported by the network device
> share a common configuration data item; and

the memory further comprises one or more additional instructions which, when executed

by the one or more processors, cause the one or more processors to perform the

steps of:

generating and displaying a common user interface object on the graphical user

interface, wherein the common user interface object pertains to common

configuration data for a common functional area, wherein the common

functional area pertains to at least two interfaces of the network device;

receiving input that indicates a change to a data item in the common configuration

data; and

based upon the input, generating the modified configuration data, wherein the

modified configuration data indicates changes for the at least two

interfaces.

61.   (New) The apparatus as recited in Claim 26, wherein:

the step of determining which of the plurality of functional areas are supported by the

network device includes determining, based on permission data, that a user has

permission to access one or more of the functional areas that are supported by the

network device; and

the step of generating and displaying the plurality of user interface objects further

comprises, based on which one or more of the functional areas the user has

permission to access, determining which user interface objects to generate and

display.